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New Zealand Transport Agency
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State Highway 22 improvements

Dear NZTA

Infrastructure New Zealand supports safety improvements along SH22 between Drury and Paerata. However, we are very concerned that an immediate-term focus on safety on this corridor has overlooked the urgent need for additional capacity along SH22 to support new housing. In light of already high traffic volumes and rapid growth, a four-lane safety and capacity solution is required today.

We agree that safety improvements are urgently required. Nine deaths and 36 serious injuries in the last decade have resulted in the Glenbrook Rd-Karaka Rd corridor receiving the highest safety risk rating on KiwiRAP. Ongoing growth along SH22 makes harm more likely in coming years.

We agree that the condition of SH22 north of Pukekohe, including at-grade un-signalised intersections and weak separation of directional traffic, increase the risk of injury. However, exclusive focus on the nature of these intersections and other risks overlooks the much more fundamental issue which is that there are simply too many vehicles using this route than can be safely and efficiently accommodated by a two-lane, two-way road.

The eastern section of SH22 already caters for up to 25,000 vehicles per day (vpd). This is a very high rate of demand for a two-lane road. Flows at this level provide limited opportunity for merging traffic, leading to increased risk taking and reduced margin for error.

Using NZTA guidelines for estimating peak traffic demand, the number of vehicles using SH22 already likely exceeds 1500 vehicles per hour per lane. These guidelines stipulate that, at 1500 vehicles per hour, interrupted flows and queuing on a one-lane road should be expected.¹

¹ See Code of Practice for Temporary Traffic Management, Section C, pg. 80.

While traffic appears to flow steadily under current settings, should new intersections, speed restrictions or other interruptions to flow be implemented, corridor capacity will reduce. Christchurch experience indicates that two lanes merging into one after a roundabout leads to rapid declines in road efficiency beyond 1300 vehicles per hour.²

Put simply, traffic demand along SH22 today is already at the limit of the road's capacity and installation of intersection safety improvements will lead to congestion before any growth along the corridor is assumed.

With large tracts of land in Paerata and around Pukekohe live zoned today via the Unitary Plan, significant traffic growth should and must be expected in the immediate term. Even greater land supply is signalled as future urban, ensuring significant ongoing growth for the foreseeable future.

New development will increase demand for road use. Without increased transport capacity within the next few years, congestion should be expected to make development of these new areas less attractive, constraining housing supply.

We acknowledge and support the Supporting Growth southern transport programme. We are aware that major new road connectivity (in addition to rail improvement via electrification to Pukekohe) is planned between Papakura and Pukekohe. However, this project is not currently funded and is planned for construction in the second decade, i.e. 2026-2036.

Additional capacity is required today. It is not sufficient to wait upwards of 15 years to provide a four lane solution between New Zealand's largest city and its largest growth satellite. Immediate safety enhancements to the corridor must, at a minimum, include four-laning between Glenbrook Rd and SH1.

Such an improvement would be sufficient to cater for the safe movement of existing traffic and growth around Paerata until a new high capacity link between Drury and Pukekohe can be consented, funded and built – likely beyond 2030.

We ask that NZTA investigate four-lane options between Pukekohe and Drury, including an indicative economic evaluation. Infrastructure New Zealand would be interested to see this analysis and would support NZTA's application to expand the project to meet urgent transport need.

We thank NZTA for considering this submission.

Kind regards

Stephen Selwood
CEO Infrastructure New Zealand

² Christchurch City Council, Traffic Efficiency Guidelines for Temporary Traffic Management, July 2013, pg. 7.